



A.D. 1853 N^o 2454.

SPECIFICATION

OF

CHARLES FLY BLUNT.

ARTIFICIAL FUEL.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO HER MAJESTY'S MOST EXCELLENT MAJESTY:

PRINTED AT THE QUEEN'S PRINTING OFFICE, EAST HARDING STREET,

NEAR FLEET STREET.

1854



A.D. 1853 N° 2454.

Artificial Fuel.

PROVISIONAL SPECIFICATION left by Charles Fly Blunt at the Office of the Commissioners of Patents, with his Petition, on the 24th October 1853.

(Void by reason of notice to proceed not having been given within the
5 *time prescribed by the Act.)*

I, CHARLES FLY BLUNT, of 19, Montague Place, Russell Square, in the County of Middlesex, do hereby declare the nature of the said Invention for “AN IMPROVED FOSSIL COAL FUEL, WHICH I DESIRE TO DENOMINATE ‘BLUNT’S DIAMOND COAL FUEL,’ ” to be as follows:—

10 The nature and intention of my said Invention is the production of a new artificial fossil coal fuel, the peculiar character of which I thus describe:—

1. It is of higher calorific value than ordinary coal ; and,
2. It produces less smoke in its combustion.

15 The manner in which I produce such said improvements is as follows :
—I compose the said fuel of the following substances in combination with each other, and the proportions of each in such combination being as follows ; viz^t. for the composition of the same the substances I employ and use are bituminous coal, anthracite coal, caustic lime, coal tar,
20 gypsum, ground coke, ground cinders, and bark, and the addition of

Blunt's Diamond Coal Fuel.

water to form of such materials a concrete mass. The relative proportions of such said materials which I use in composing such concrete mass are the following, viz^t:—

						Parts by Weight.	
Bituminous coal	-	-	-	-	-	100	5
Anthracite coal	-	-	-	-	-	150	
Ground coke	-	-	-	-	-	90	
Ground cinders or bark	-	-	-	-	-	90	
River or sea sand	-	-	-	-	-	10	
Caustic lime	-	-	-	-	-	20	10
Gypsum	-	-	-	-	-	10	
Coal tar	-	-	-	-	-	30	
Water	-	-	-	-	-	500	
						1000	

I take such materials so proportioned to each other as regards their respective and relative quantities, and I intimately mix them together by grinding or other manipulation of like nature and intent, and I then mould, cast, or press the concrete material so prepared in particular forms or figures in equal and uniform blocks; and the forms which in practice I find best suited to such purpose are the following, viz^t:—

1, the sphere, or spheroidal modifications of that solid; 2, the cylinder; 3, the prism; 4, the figure termed dodecahedon, of 12 equal pentagon faces; 5, the cube; & 6, parallelopipedon; such forms being chosen by me because, when in action, they afford the most suitable interstitial spaces amongst themselves to insure a due supply to and intermixture of atmospheric air with the gases produced in combustion, and thus support and increase it.

The claim is for the forms or figures of the blocks of fuel, as regards the interstitial spaces they afford in their arrangement when in use and action, and taken in combination with the composition hereinbefore stated.

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